

WHAT IS CLAIMED IS:

1 1. A portable computing system with selectable transceiver switching
2 comprising:
3 a set of one or more transceivers, each of the transceivers with a unique
4 communication protocol;
5 a switch capable of differentiating communication signals and determining
6 and choosing an appropriate transceiver from the set of transceivers to
7 communicate for the computing system; and
8 a multi-band antenna capable of receiving and transmitting varying frequency
9 signals to the chosen transceiver.

1 2. The portable computing system of claim 1 wherein the switch is a
2 zener diode that differentiates upon power transmission.

1 3. The portable computer system of claim 1 wherein the switch is an
2 active power sensor device.

1 4. The portable computer system of claim 1 wherein the switch is a
2 current limiter device.

1 5. The portable computer system of claim 1 further comprising:
2 a lookup table that associates transmission power with each of the
3 transceivers, whereby the switch selects a transceiver from the set of
4 transceivers when a certain power state in the lookup table is detected.

1 6. The portable computer system of claim 5 wherein the switch selects a
2 transceiver based on a transmitted power.

1 7. The portable computer system of claim 5 wherein the switch selects a
2 transceiver based on a received power.

1 8. The portable computer system of claim 1 further comprising:
2 a software driver that interfaces to the transceiver and interfaces to an
3 operating system of the portable computer system, whereby the
4 software driver receives instructions as to which transceiver of the set
5 of transceivers to select.

1 9. The portable computer system of claim 8 wherein the software driver
2 receives instructions from a higher level protocol stack of the portable computer
3 system.

1 10. The portable computer system of claim 8 wherein the software driver
2 receives instructions from a set of software applications of the portable computer
3 system.

1 11. The portable computer system of claim 1 wherein the set of
2 transceivers and the switch are integrated into a circuit card.

1 12. The portable computer system of claim 7 wherein the circuit card
2 connects to a system board of the portable computer system.

1 13. The portable computer system of claim 7 wherein the circuit card is a
2 Mini PCI card.

1 14. A method of switching between a set of one or more transceivers
2 within a portable computing system comprising:
3 looking up in a state table corresponding power and frequency values;
4 comparing the power and frequency of a received signal to the corresponding
5 power and frequency value; and
6 selecting a transceiver board capable of processing the received signal.

1 15. A method of switching between a set of one or more transceivers
2 within a portable computing system comprising:
3 looking up in a state table corresponding power and frequency values;

4 comparing the power and frequency of a transmitted signal to the
5 corresponding power and frequency value; and
6 selecting a transceiver board capable of processing the received signal.

1 16. The method of switching between a set of one or more transceivers
2 within a portable computing system of claim 14 wherein:
3 selection of a transceiver is performed by a software driver.

1 17. The method of switching between a set of one or more transceivers
2 within a portable computing system of claim 16 wherein:
3 the software driver is instructed by a higher level protocol stack.

1 18. The method of switching between a set of one or more transceivers
2 within a portable computing system of claim 14 wherein:
3 the software driver is instructed by a set of software applications of the
4 portable computer system.

1 19. The method of switching between a set of one or more transceivers
2 within a portable computing system of claim 15 wherein:
3 selection of a transceiver is performed by a software driver.

1 20. The method of switching between a set of one or more transceivers
2 within a portable computing system of claim 19 wherein:
3 the software driver is instructed by a higher level protocol stack.

1 21. The method of switching between a set of one or more transceivers
2 within a portable computing system of claim 19 wherein:
3 the software driver is instructed by a set of software applications of the
4 portable computer system.